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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,463	11/20/2003	Alan Britt	33053US1	9861
116	7590	10/29/2004	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			COMPTON, ERIC B	
			ART UNIT	PAPER NUMBER
			3726	

DATE MAILED: 10/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/718,463

Applicant(s)

BRITT ET AL

Examiner

Eric B. Compton

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 17, 18 and 20-24 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/20/03 & 9/29/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 17 is objected to because of the following informalities: in line 3, "recess" (first occurrence) should read --recesses--, and in line 3, "an end" should read --the ends--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 20-24 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 20 recites the limitation "said arcuate dimension" in line 2. There is insufficient antecedent basis for this limitation in the claim. Claims 21-23 depend from claim 20 and therefore are also indefinite.
4. Claim 24 recites the limitation "said toroidal base" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 3726

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 17-18 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of U.S. Pat. 4,429,927 to Kawabata.

AAPA, as found on pages 1-2 of the Specification discloses, the problems in the art with casting crankcase casings for small engines of the type claimed by Applicant.

However, AAPA does not disclose casting the casings having a plurality of rounded radially inwardly directed flutes to receive press-fit bearings.

Kawabata discloses a method of manufacturing a casing "for a speed change gear mechanism" (Col. 3, line 15) comprising the steps of casting a casing having a chamber, first and second bearing recesses (4) at the ends of said chamber, each recess (4) being defined by a cylindrical sidewall (2) having a plurality of rounded radially inwardly directed flutes (20) formed thereon, and pressing a roller bearing (14) into each recess (Col. 2, lines 20-21).

Kawabata discloses the same rationale as Applicant,

It is a primary object of this invention therefore to provide a novel and excellent casing shaped from a light metal material by die-casting, which does not require precision machining at the mounting portion after the die-casting operation and can permit mounting of a bearing member for journalling a shaft to the mounting portion in the as-cast state.

Col. 1, lines 35-41. Furthermore, the reference teaches

Referring to FIG. 3 which shows a mounting portion in a first embodiment of the casing constructed in accordance with this invention, the casing shaped by die-casting from a suitable light metal material such as aluminum or an aluminum-base alloy has formed on the inner surface of its side wall 2 a mounting portion 6 defined by an annular protruding portion 5 having a circular inner surface 4 as in

Art Unit: 3726

the mounting portions in the conventional casing. According to this invention, a plurality of supporting protrusions 20 are formed at suitable intervals in the circumferential direction on the circular inner surface 4. In the embodiment illustrated in FIG. 3, eight supporting protrusions 20 are formed at equal intervals in the circumferential direction. The projecting heights of these supporting protrusions 20 from the circular inner surface 4 are substantially the same. The supporting protrusions 20 may be formed over the entire inner surface 4 in the axial direction as shown in FIG. 3, or they may be formed over only part of the circular inner surface 4.

Col. 4, line 60 – Col. 5, line 11.

Regarding claim 17, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed the crankcase casing of AAPA having a plurality of rounded radially inwardly directed flutes to receive press-fit bearings, in light of the teachings of Kawabata, in order to permit mounting of the bearings in the as-cast state. See Col. 1, lines 35-41.

Regarding claim 18, as shown in Figure 3 of Kawabata the flutes are evenly spaced about the cylindrical surface separated by arcuate sidewall portions.

Regarding claim 24, Kawabata discloses that the bearings are pressed into each recess until its seats on the base. See Figure 4.

Allowable Subject Matter

7. Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Note: claims 20-23 depend from claim 19, but suffer from the 112, second paragraph deficiencies noted above.

Art Unit: 3726

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or suggest a method of manufacturing a crankcase, wherein the flutes in the first bearing recess are offset an arcuate distance with respect to the flutes in the second bearing recess, in combination with the other claimed subject matter. See Figure 17-19; Specification, page 8 ("The offset relationship of the flutes 132 and 134 helps to minimize noise and vibration.").

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B. Compton whose telephone number is (703) 305-0240. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter B. Vo can be reached on (703) 308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/718,463

Page 6

Art Unit: 3726

A handwritten signature in black ink, appearing to read "Eric Compton", with a long horizontal stroke extending to the right.

Eric Compton
Patent Examiner